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3335 Main St., Buffalo, New York

Editor

CHARLES H. KEENE, M. D.

University of Buffalo, Buffalo, N. Y.

Assistant Editor

EARL E. KLEINSCHMIDT, M. D.

Loyola University, Chicago, Ill.

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THE JOURNAL OF SCHOOL HEALTH

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Vol. XI JANUARY, 1941 No. 1

THE MODERN SCHOOL PHYSICIAN: THE PHYSICAL EXAMINATION*

BENJAMIN SPOCK, M.D.

The conception of what the school should be and should provide is changing and broadening. School medicine has a potentially greater contribution to make to this wider field. One can go further and say that the new concept of education cannot be rounded out in theory or practice without more extensive participation by the medical members of the staff. Yet this aid is not forthcoming.

When education conceived of its work as the imparting of a number of academic subjects, the school doctor was only an appendage of the school with little relationship to the main work. He fulfilled his function by being a specially trained doorman who singled out cases of contagion or physical defect and made the correct disposal thereof.

But as education came to realize that in the widest sense its job was to guide the development of the growing child not only intellectually, but physically, emotionally, socially, then obviously education acquired a need for medical guidance in both the physical and psychological spheres all day long, in classrooms, gymnasium, teacher conferences, and in dealing with parents.

But only an infinitesimally small number of schools are getting anywhere near the optimal amount of medical assistance in this sense, and a vast number have none at all. On the one hand, the school may be either unaware of the help it might get, or, being aware, has not the money or has not the backing to supply it. On the other hand, medical education is not providing physicians with a training which combines the physical, emotional, and educational aspects of children to a degree sufficient to give maximal assistance to educators.

* This is the first of a series of five articles by Benjamin Spock, M.D., which are reprinted by permission from *Progressive Education*, December 1939 to April 1940. The divisions between these articles, and the titles of them as they originally appeared have been changed slightly by the Editor. These have been issued as a single reprint by *Progressive Education* in pamphlet form under the title, "The Changing Task of the School Physician." Price $0.50.

The supervision of the health of the individual usually starts in school with a fall physical examination. Examinations alone, without a history of the child's past, are more limited in the information they give than most laymen realize, as will be discussed later, but their usefulness may be further limited by being available for only a part of the student body or by being hurried.

In some schools, the teacher sends for examination only those children who look sickly to her. This method obviously is hazardous, because there are diseases that do not show through the clothes, in the face, or in behavior. But, if only a fraction of each class can be examined, the teacher is in as good a position as any layman to select, for she knows each pupil well and has a whole class for comparison.

In other schools, a group of doctors work as a team, one man doing the eye tests, another listening to hearts, and so on. Such a method may be justified if one capable doctor has the time and responsibility to correlate the previous data and finish the examination himself, estimating the pupil as a whole. But this may take enough time to outweigh any efficiency in the specialization of the method. If no one sees the pupil as a whole, the method is thoughtless and dangerous.

In schools where one doctor performs the whole examination of the pupil and where every pupil is examined, there is still no guarantee that the best results will follow unless the physician is capable and has sufficient time. A hurried examination may be worse than none at all, if it fails to detect illness but gives the pupil a false sense of security. To pay school physicians twenty-five cents a pupil is as effective a method of rushing them as any.

But let us assume that the physical examination the child gets is competent and unhurried. Is it an adequate appraisal of his health—does the doctor know for sure at the end of it whether the child is functioning optimally? The answer is, "probably not".

The most careful physical examination will leave large areas of his anatomy and most of how he functions undisclosed. If a physician taking care of a patient not acutely ill had to choose between history or examination, he would probably choose history as giving him more information.

Let us take up some of the areas covered in the usual competent school examination and see the values and loopholes in the procedure:

State of nutrition is an illustrative example. Knowing how a child's present weight compares with his weight in the past, knowing what and how he eats, how and how much he sleeps, tells us infinitely more with which to evaluate his present state and what to do for it than just knowing his weight or inspecting his physique.

Let us take two extreme cases to make this point. One child is called malnourished in a school examination. He is of tall, narrow build like both his parents. He has been tall and slender since infancy, but has always eaten a moderate amount of a balanced diet. He has never been a feeding problem. He gets along well with other children and at home has no excess of anxiety or activity and sleeps plenty. He has always gained weight steadily, but only enough to keep up with his height, never enough to change his proportions. If the rest of his physical examination and laboratory tests are negative, we can hardly call him unhealthy. A doctor will be unlikely to have anything constructive to offer this child in the present state of our medical knowledge. (This is not to state that just because a child has come from tall stock and has always been thin, we are to ignore him. In many such cases the hours of rest, the diet, causes of emotional tension can be modified enough to cause definite improvement in nutrition.)

At the other extreme is a child whose state of nutrition in a physical examination has been called excellent. Yet in the preceding six months instead of having gained weight he may have lost several pounds due to a serious disease which happens to have caused as yet no obvious symptoms. The limitations in the evaluation of nutrition from a single physical examination are emphasized because defective nutrition is one of the most frequent findings in school examination.

What other findings besides state of nutrition are commonly reported as the result of school examinations and how significant are they? Defects of vision, of hearing, of posture, the state of the nose and throat, especially the tonsils, cardiac conditions, skin diseases, anemia, tooth decay are the commonest.

Defects of vision in children in the great majority of cases are first discovered in the simple test of reading an eye chart at twenty feet in a school examination. This is perhaps the outstanding contribution of school medicine.

Some schools are further equipped with apparatus for the diagnosis and treatment of faulty eye movements in scanning the line

of print. Such disturbances can interfere with reading as much as the more familiar difficulties of focussing. The expensiveness of the apparatus and the infrequency with which school children can be expected to be routinely tested by an eye specialist make the school an appropriate and efficient place for such work.

The importance of detecting a visual defect goes far beyond the danger of strain to the eyes themselves, for it may interfere with the learning process to a severe degree, and through that, affect the child's whole adjustment.

Much the same applies to testing of hearing. It is fairly regularly done in school examinations, in recent years by electrical audiometry, an efficient method peculiarly suited to group testing. It is important to know if a child has defective hearing, not only for the sake of the ear but for the sake of learning ability.

Defects of posture justifiably receive considerable attention in the well-organized school either by the physician or the physical education department. Some defects need to be referred to the orthopedic specialist, others are amenable to special exercises or special games. It is very desirable for the physical education department to provide this, for certainly youth is the ideal time if improvement is to be secured. Many cases of poor posture have a large emotional element and account should be taken of this both as it contributes to the understanding of the child and as it applies to the best treatment of the defect. If the posture can be improved, it may of itself contribute to a better emotional attitude.

It is fortunate that vision, hearing, and posture are all important to the school and, therefore, more carefully examined there, because relatively they tend to be slighted in routine examinations in clinics and many doctors' offices.

Conditions of the nose and throat, particularly enlargement of the tonsils, are frequently reported in school examinations, some would say too frequently. There is considerable difference of opinion among physicians about the indications for tonsillectomy, and the history of how the tonsils perform is just as important as their appearance in deciding on their fate. Therefore, it is an area where the school physician should either get the story or else be cautious about recommendations.

Apparent abnormalities of the heart, usually murmurs, are also frequently reported on school examinations. It is only a minority of heart conditions whose significance can be determined on one ex-

amination—for the great majority a history of the past, laboratory tests, and observation in the future may all be necessary. Therefore, great tact is essential in calling attention to them.

The school doctor is almost never justified in limiting exertion or otherwise invalidizing a child on the basis of his examination alone. (Italics by Editor.)

The school doctor is on safe ground in reporting skin diseases, especially the contagious ones. It is obviously important to detect and exclude during treatment the diseases like impetigo, ringworm, and scabies which are fairly communicable from child to child, and which can be recognized by physical examination alone.

The diagnosis of anemia is unreliable without an actual sample of the blood. A person can be appreciably anemic without it being obvious, and the sallow ones that appear anemic often turn out not to be. Few schools perform hemaglobin tests.

In all school examinations the teeth are at least inspected casually and cases of obvious decay are urged to get dental care. In some public schools all pupils whose parents desire it are actually transported to dental clinics in batches. This is a valuable contribution, especially where through poverty, ignorance, or inertia, the parents cannot be counted on to have their children's teeth watched regularly. Where clinic examination and treatment is not provided for all who desire it, and where the financial level does not afford routine inspectional visits to the private dentist, a school dentist to check all pupils is a highly desirable addition to the school staff, for he can obviously detect disease that is not apparent to the physician on inspection alone.

Provisions for caring for irregularly spaced teeth are less satisfactory because of the expense involved.

Many of the glandular imbalances may be diagnosed or suspected on examination. Here a word or two of caution might not be inappropriate. Popular enthusiasm on glands has tended to outdistance scientific knowledge. Many assume that every child who is too short, or too fat, too stupid, or too nervous is simply a glandular problem, to be corrected by the appropriate pill or injection. This is not true in a great majority of such cases, at least as far as our present knowledge goes. It takes more than one symptom to constitute a glandular unbalance. Even in the cases correctly diagnosed, the treatment has had proved efficacy in only some of the diseases. In other glandular diseases, the attempted treatment

has either proved worthless, or debatable, or it has brought about secondary side effects which make it undesirable or dangerous. It is, therefore, futile for teachers to leap too readily to the conclusion that glands will explain or solve all their problems; it is unwise for nurses or school physicians to use the term too glibly with pupils or parents, lest they raise hopes unjustifiably or set the family hunting for quacks if sound doctors admit they can perform no magic.

The observation of distinct glandular types, even though some of them may be untreatable in the present stage of knowledge, is certainly desirable for the light it may shed for the school staff on the child's adjustment, scholastically and socially, and for the clues it may afford in attempting to adjust the school to the child.

So far we have been discussing the significance of conditions that may be discovered on physical examination alone, and which frequently are reported from such examinations at school. We might add at this point a few conditions which are seldom reported, but which might well be if school medicine is to be more useful.

Acne deserves special emphasis. It is so often taken for granted by the parent, the teacher, and the doctor, at the same time that it is agonizing or even socially incapacitating the adolescent child. Yet treatment can be very helpful in a majority of cases. One trouble is that the adolescent is at a healthy age as far as acute disease is concerned and seldom sees his own doctor. Adolescents from even well-to-do families will often say they have no doctor, not having seen their "baby doctor" for several years and not having had any serious illness that warranted calling the adult practitioner. Therefore, a special responsibility rests on the school physician.

Another subject which needs more emphasis is development, aside from nutrition. How does a boy compare with his classmates in stature, in bodily proportions, in musculature, and, during the adolescent years, in the stage of development of the genitalia and the secondary sex characteristics, such as facial and bodily hair, and voice? Examples occur in most adolescent classes of individuals who are out of line with the rest of the group in physical development. This is conductive of complications in the emotional, scholastic, and social spheres. Such data are not for reporting to parents or to family physicians, but for the benefit of the school, which wants to be oriented toward the pupil as a whole.

The conditions we have discussed briefly are not the only ones that can be detected by a physical examination, but are the most

common. To the person not a doctor it may sound like plenty. What is left out?

The various forms of nephritis (or "Bright's disease"), the urinary infections ("pyelitis"), and diabetes, are usually diagnosed by urinalysis. Very few schools test urine, most usually because of expense or habit, but the fear of encroaching on the private doctor probably plays a role in schools in well-to-do regions.

Tuberculin testing is important, particularly in the adolescent years. It is of some help from a public health point of view in tracking down the cases of active tuberculosis. Positive tests in children of grammar school age seldom mean active disease in them, but may disclose it in some adult in the home.

In the adolescent years the danger of active tuberculosis begins to increase, and it is desirable to know which children are tuberculin positive, so that they can be watched more carefully and X-rayed on slight provocation for signs of activity.

Tuberculin testing of children on a large scale has been done (with X-rays of positive reactors) in a few places as part of a public health project, but it is not done generally.

Congenital syphilis may show up on physical examination alone, but latent cases can be determined only by tests which are not done in schools.

Gonorrhea is not rare in girls before puberty, among those living in very crowded and unhygienic surroundings. Most nurseries require a microscopic examination of the vaginal secretion before admission. In usual school examinations it would be missed because the genitals are not even inspected.

The various vitamin deficiencies, unless of marked degree, must be diagnosed by laboratory methods. These methods, and the discovery through them that mild and moderate deficiencies are much more prevalent than was formerly suspected, are relatively recent and hardly out of the experimental stage. Without any doubt, however, the routine testing of children in this respect will come to be expected and demanded as an essential part of the appraisal of the child.

* * * * *

VITAMIN ADVERTISING,—The present spectacle of vitamin advertising running riot in newspapers and magazines and via radio emphasizes the importance of the physician as a controlling agent in the use of vitamin products.

Mead Johnson & Company feel that vitamin therapy, like infant feeding, should be in the hands of the medical profession, and consequently refrain from exploiting vitamins to the public.

NUTRITION AND DENTAL HEALTH EDUCATION AT DIFFERENT GRADE LEVELS IN THE ELEMENTARY SCHOOLS*

HARRIET STONE, B.S., M.S.
Supervisor of Nutrition, Newark Public Schools, Newark, N. J.

We, as individuals, can do much to protect or improve our dental and nutritional condition. This isn't exactly a new discovery, but for some reason it has not yet been very effective on any large scale.

The last fifteen years have been productive of many investigations in the field of nutrition and its relation to dental conditions, and there is convincing evidence that diet does play an important role in dental health. Though there are still conflicting theories concerning the way in which diet plays this role, there seems to be little doubt among our investigators that food and nutrition are important factors.

Fortunately the diet which is proposed to help build and maintain good teeth is not a restricted, unbalanced, or difficult one on which to live. On the contrary, it is the best diet which we know today, the optimal diet. Doubly fortunate it is that this diet, which seems to be best for good teeth, is one that is also good for strong bones, strong muscles, and good health in general.

Why then, if this is such a good diet—that is, good for so many things and not difficult to take—don't we all take it, and have many of our dental troubles disappear? It sounds simple, but there are obstacles.

Perhaps the greatest obstacle of all would be eliminated if we could just grow up on this diet, for it is much more difficult to change tastes and habits than it is to form them originally. One of the problems of the public school seems to be that most children have already learned so many things before they enter school that need to be remodeled or replaced. The eating habits often need remodeling, and if this can be done successfully the first important step has been taken to improve dental conditions, not only for the present generation, but perhaps even more for future ones.

There is no question of the need for both nutritional and dental care at all grade levels, among public school children. Surveys

*Presented at the joint session of the Food and Nutrition, American School Health Association and Oral Health Group Section, of the 69th Annual Meeting of the A.P.H.A., October 11, 1940.

show large numbers needing dental care, and far too many poorly nourished, in a country where both food and dentists are, or can be abundant. Dr. Thomas Parran, Surgeon General of the United States Public Health Service, recently stated: "Every study of nutrition, by whatever method conducted, shows that malnourishment in this country is widespread and serious."[1]

Economists tell us that this is due to the great disparity between production and distribution, also between services available and the ability to buy these services. No one doubts that there is an economic problem involved which economists will have to help solve, but we educators believe there is an additional problem which we must find a better may to solve than we have done in the past.

When nutrition teaching and various types of nutrition programs were introduced into the schools more than twenty years ago, some people, including some school officials, were opposed to spending money or time for this work. The reason that was offered, and is still offered in some places, is that it is responsibility of the home to feed the children and to teach them what to eat.

Well, of course, if all homes were doing a good job of feeding and of teaching nutrition and dental care, there would be no need for it in the schools, but we have overwhelming evidence in every school that the job is not being done well enough, and, therefore, schools must assume leadership and more responsibility for this phase of education.

True enough, children do most of their eating at home and the major care of their teeth is not given in the classroom, therefore the schools cannot and do not assume all responsibility for this phase of health. Even so, it is possible to teach many essentials with regards to nutrition and dental health in the classroom and to teach them effectively.

Some health teaching fails because too immediate rewards are implied, and when these rewards are not realized, children become discouraged or lose faith in them. Johnny, age seven, refused milk at school after being a steady customer for more than a month. All persuasion failed and Johnny's mother was sought for some explanation. It was learned that he didn't drink milk at home—he didn't like it, but was taking it at school because his teacher had said if

1. Parran, Thomas, Health and Medical Preparedness. J.A.M.A. 115: 49-51 (July) 1940.

he drank milk he would have good, strong teeth. Much to Johnny's dismay, at the end of the month his teeth still had big holes in them!

Nutrition and dental health teaching must seek a different basis from this immediate reward basis. Nutrition teaching, in particular, cannot be so directly tied up with cause and effect, for inward improvement will be going on some time before there will be outward signs of it, hence neither the child nor his teacher will be able to recognize the beginnings and will have to continue good habits on faith for a time.

Experience has shown that the eating habits of children are not influenced much just by good advice. They have been told so many times to drink milk and eat vegetables that they have actually become "allergic" to the sound.

How then can we arouse active interest in those things that we believe to be desirable or essential in the daily choices and behavior of individuals? This is the challenge to education, for that interest must be aroused before the learning takes place that directs behavior.

The teacher's fundamental training in child psychology helps her to understand children, and her close contact with them in the elementary grades, make *her* the key person to do the teaching of health, including nutrition and dental health. She is in the position to observe and determine individual needs and abilities, to introduce activities and arouse interests, and to some extent to help establish habits. The average teacher will need help to prepare her to do this work and she may need help to carry it through. This help can be given as part of the in-service training for teachers. Good, constructive supervision and credit courses offered in the different aspects of health, including dental health and nutrition, are ways of providing help that the teachers need and want. Teacher interest is aroused through committee work on curriculum studies in health education, and much valuable teacher guidance can be given in this way.

Nutrition and dental health education should be a regular part of the organized health education program, and must be graded to different age levels just as all other aspects of the curriculum are graded, otherwise health education is almost entirely neglected or it becomes a "hodge-podge" of generalities, worn threadbare by repetition, and not very useful even if it should be remembered.

This graded education should begin in the kindergarten in a very simple way and should progress from grade to grade with ever increasing relationship to all other phases of education. The pupils in the kindergarten, first and second grades, are very much influenced by their teachers, what they say and do. We are not interested to have these young children stuffed with knowledge about teeth and foods, but we do want them to eat the essential protective foods daily, and we want them to like these foods, also to know that they are the approved foods for children. We want them to clean their teeth regularly, and to safeguard them against injury—to think of the dentist as their friend who help to care for their teeth so they will not be afraid to go to him for examination and dental care. These, it seems to me, are the immediate aims of nutrition and dental health education for the younger pupils in school. They are primarily concerned with attitudes and behavior. The daily health check-up or morning inspection offers a good opportunity to approve clean teeth, to commend those who are having work done, and to encourage others who need it. A mirror hung in the classroom at the proper height for the pupils to look at themselves and inspect their own teeth is an effective way of creating interest and self appraisal. The tasting parties of raw and cooked vegetables, whole grain cereals and dark breads, the milk period in which the teacher participates are all well tested methods to arouse interest and influence attitudes and behavior.

Evaporated milk may be used for the milk period in any situation where it is difficult to supply fresh milk or where the cost of fresh milk prohibits its use by some of the pupils. Many children will already like it, and the others learn to take it quite readily. There is generally no necessity to disguise it with chocolate syrup or other flavoring because most young children will take it plain if the teacher introduces it to them a little at a time and creates an interest in it when she does so.

Kindergarten teachers must try to help control the use of sweets, and teachers in every grade should give much more attention to this problem. Candy should not be sold in school, and birthdays, if celebrated in school, should not be a time to pass around lollypops, cake, or other sweets. Other pleasures that do not conflict with the health teaching will be enjoyed. For example, one primary teacher found corn popping a delight to the pupils, and another used gaily decorated paper napkins for the milk period, and

a place of honor at the head of the table for the child whose birthday was being celebrated. Children do not have to have cake and candy in order to enjoy a party, as most grown-up people seem to think. It is the spirit of the party that fascinates them.

There is definitely a need for much better control of sweets in many school systems. The habit of selling candy in school to raise money for various and sundry purposes, of serving frosted cookies or other sweet cakes with the milk, and of serving sweetened flavored milk drinks instead of plain milk are not only unwise and contrary to the best health teaching, but are actually harmful from the dental standpoint if we are to rely on the evidence of much dental research.

Pupils in the intermediate grades have reached the place where they do not accept statements by their teachers or by anyone else just at their face value, they want to be shown, and they love to experiment. They are keenly interested in all kinds of activities, and they learn best through participation in these activities. The amount of knowledge which we hope they will acquire at this age level is greater than for the younger pupils, and should be the outcome of their experiences. The intermediate teachers, therefore, must be ready to introduce their pupils to new work through interesting activities. The nutrition and dental health work of the fourth, fifth, and sixth grades should be based on, and grow out of, the work of the earlier grades. It should not be just repetition of the earlier work. We must now give pupils more responsibility for their own health behavior and help them learn how to make wise choices for themselves.

Fourth grade pupils like to bring samples to school and tell about them. So, for example, we let them bring samples of the kind of leaves they eat at home and find out information about them; how and where they grow; how purchased; by the bunch, pound, head; how used at home; raw, cooked, in soup, with other vegetables. Many different kinds of vegetable leaves are examined and identified, *washed,* and tasted, and finally a salad is prepared by the class from contributions to the salad bowl brought by various children and their teacher. Some classes like to set up an exhibit of the various leaves we eat, with pictures, samples, costs, etc., featured, or they may grow, in window boxes, their own leaves until they are large enough to use on open-faced brown bread sandwiches.

Knowledge of our cereal foods is gained through a study of the

grains that are used to make them. A collection of empty cereal boxes brought from home gives the teacher some insight into the kinds of cereals used at home, and furnishes some interesting information for the pupils. Post toasties, Pettijohns, Ralston, Farina, do you know by the names from which grains they are made? No, and the children don't either, but they learn from the labels on the boxes, and they learn whether they are whole grain cereals or refined ones, or a mixture of grains. Now they want to see and taste them, so again they bring samples from home.

They cook a whole grain cereal and everyone has a dish of it with milk. They make cereal exhibits showing the grains from which they are made, the ones that are made from the entire grains, and the ones that are refined, the prices of the different kinds, and the cost of servings. Some classes get the whole wheat, grind it themselves, then cook it or make whole wheat bread. No other bread ever tasted so good! One little boy, his eyes glowing, said, "Oo-ooh! it tastes just like cake."

Milk enters into many activities at this intermediate level. They take milk apart, and see what it is made of. For the first time in their lives, if they are city children, they may learn what buttermilk is. And those curds and whey, which they always thought were just Mother Goose rhymes, become a reality, to the astonishment of all. They like to make junket and pot cheese and drink the whey, and churn their own butter and drink the buttermilk. Milk was never half so interesting before!

Fifth grade pupils like to inspect their own teeth and chart their findings. So with the help of a small mirror and a self-made diagram of the upper and lower jaw, with all teeth in place which *should* be there, they each make as careful inspection as they can of their own mouths; rubbing out from the diagram teeth that have been lost, inserting large and small cavities in the proper teeth, and carefully shading teeth that do not look clean. When this is done each pupil has his own drawing of his own mouth as he sees it. These do not become official records, of course, but these "self-portraits" prove to be even more effective in getting action for corrective work.

They make tooth powder in their classrooms according to a simple formula approved by the American Dental Association, and each child takes a small amount home to clean his own teeth.

Having spent considerable time in their earlier grades learn-

ing about milk, cereals, fruits, and vegetables, and having much interest aroused concerning them, the time arrives to let the pupils use their knowledge and ingenuity to combine them into interesting patterns or meals. They have not yet learned about the composition of food; minerals, vitamins, proteins, and the like, so they still think in terms of apples, potatoes, eggs, and milk.

Sixth grade pupils understand that we do most things better if we have a plan to guide us, for in modern schools children begin in the kindergarten to help plan their activities. So it is not a new or strange concept to them that we will have better breakfasts, lunches, and dinners if we have some kind of plan to guide us when we choose our foods. A minimum standard which calls for milk in some form, a fruit or a vegetable, and a whole grain cereal food at each meal, is about as simple and satisfactory a guide as we can find. They plan easily prepared low cost meals, ones which they could prepare for themselves if necessary; shredded wheat biscuit, sliced banana and milk; peanut butter sandwich, an apple and glass of milk. They can think of many such combinations, all of which measure up to their standard. They calculate the cost of their meals, and the spirit of competition which begins to be keen at this age can be utilized to advantage, for they like to see who can plan the best meals for one day at the lowest cost. Much discussion enters into the evaluation. Sometimes the prize lunch is prepared at school in the classroom.

An animal feeding experiment to demonstrate the effects on growth of one diet that measures up to their standard, such as whole wheat bread, milk and lettuce, as compared to a diet of coffee, white bread, and lettuce, is one of the most interesting and convincing experiments. The pupils construct the cages, care for the animals, weight them weekly, and construct their growth curves. This is a splendid time to teach them to balance the scales, weigh themselves weekly, and construct their own growth curves. They keep records of their own meals and evaluate them.

So the pupils have reached the seventh grade, junior high school level, and up to this time they have not yet been introduced to vitamins, minerals, calories, proteins, or the more complicated processes of digestion and utilization of food.

When one considers the relatively small amount of time that is allotted to health education in the average school curriculum, and the many different aspects of health that must share in this time,

we realize that it is better to simplify our objectives in nutrition and dental health, but to be sure to choose essential ones, and to spend our time to develop well what we do. Perhaps it is neither necessary nor desirable to crowd such a large amount of our health education down into the elementary grades, for if we do, then when they reach the Junior High School level—Ah Phooey! they've heard all that—it's baby stuff. No it's got to be something new and up to the minute, if we expect seventh, eighth, and ninth grades to be interested. What could be newer and more up to the minute than our recent knowledge of nutrition and dental health?

* * * * *

Smallpox,—Of all the communicable diseases that have scourged mankind, the one that has been immunologically preventable for the longest time and on the whole most satisfactorily is smallpox. It is a reflection on the effectiveness of our particular form of democracy, desirable as that political condition may otherwise be, that *India alone has a higher smallpox rate than the United States.*

Perhaps we should congratulate ourselves that the year 1939, according to a recent issue of the *Statistical Bulletin* of the Metropolitan Life Insurance Company, registered an improvement over 1938, a drop from 14,983 cases to only 10,059—of an entirely unnecessary disease! Even with this decrease, the annual average of 9,563 cases for the preceding five years is still exceeded.

The smallpox belts of the United States consist of the north-central states and those lying west of the Mississippi River—sections, apparently, where personal liberty still bulks larger, in some particulars, than does the common good. A number of these states showed a rise in smallpox incidence—notably Ohio, Indiana, Michigan, Iowa, Oklahoma, and Tennessee; other records on the wrong side of the ledger were chalked up against California, Texas, Illinois, and Washington. We may reasonably point with pride to the fact that the six New England states and New Jersey, Pennsylvania, Delaware and Maryland, with a combined population of over 25,000,000 have reported a total of 14 cases since 1933.

Vaccination has unfortunately been accepted for years by a vociferous group as a symbol of the loss of individual liberty. How dearly such liberty can be bought will be discovered by the north-central and western states if the present mild type of smallpox suddenly develops into the virulent variety. Editorial, The New England Journal of Medicine, December 5, 1940, p. 951.

HEALTH FOR DEFENSE*

A 7-point program to strengthen national defense through improved health and physical fitness of every child in every school throughout the country is recommended by the U. S. Office of Education, Federal Security Agency.

School administrators and health workers who recently met in conference in the Office of Education, at the call of Dr. John W. Studebaker, U. S. Commissioner of Education, drafted a 7-point proposal which includes:

1. Secure and maintain a safe and healthful school environment.
2. Make adequate provision for the school lunch.
3. Provide health service for pupils, teachers and other school employees.
4. Give instruction in health and safety.
5. Make provision for physical activities intended to develop physical and social fitness.
6. Provide recreational programs to meet needs of children and youth after school and in vacation periods, and needs of adults in the community.
7. Establish educational camps to insure for all children the experiences that only come from close contact with nature.

Health and Physical Fitness For Every Child
A Program For Every School

1. Securing and maintaining a safe and healthful school environment, including:
   a. Periodic surveys of the school plant covering space per child, safety provisions, illumination, ventilation, seating, sanitary toilets, hand-washing facilities, provision for drinking water, housekeeping, etc.
   b. Modification of the school plant to remedy unsatisfactory conditions for health and safety, such as improved lighting and ventilation, changed color of walls, finish of blackboards, more suitable seats, elimination of dust, and provisions for rest rooms for teachers, shower baths, and playgrounds.
   c. Continuous maintenance of safe and sanitary conditions by trained custodians and informed teachers.
   d. Selection, training, and supervision of custodians.

* Federal Security Agency, U. S. Office of Education, Washington, D.C.

e. The hygienic arrangement and management of the school program according to the interests and abilities of the pupils.

f. The wise assignment of home study so that it will prove healthful rather than harmful.

2. Adequate provision for the school lunch:

a. Suggestions for menus to parents, with supplementary provision and hygienic management of the lunch in small schools.

b. Adequate provision for a school-furnished lunch in larger schools and its educational direction by trained nutritionists.

c. Nutrition education in the classroom coordinated with provisions and practices of the lunch room.

d. Provision of nutrition services for special classes.

3. Health services for pupils, teachers, and other employees:

a. Control of communicable disease in cooperation with public health agencies—

(1) The detection, exclusion, and reporting of cases.

(2) Immunization against smallpox and diphtheria.

(3) Instruction in the causes and prevention of such diseases, including venereal disease.

b. Adequate periodic and other needed examinations of pupils, in all grades, by the family or school physician and dentist, assisted by specialists such as oculists, speech diagnosticians, and psychiatrists when deemed advisable.

c. Follow-up services by the school nurse, dental hygienist, psychiatric social worker or other qualified personnel in order to secure treatment of diseases and defects, by interviews with parents, and by arranging for treatment of children of the indigent at public clinics.

d. Provision of special classes for the anemic and malnourished, for cardiac cases, for the near blind and near deaf, for the speech defective, and for those with tubercular infection.

e. Where not arranged for by some other agency, the health examination of pre-school children with follow-up to secure treatment before school entrance.

f. Health examination of school employees:

(1) Critical examinations before employment to determine physical fitness.

(2) Periodic examinations (confidential in nature; the results not to be reported to employers except in case of communicable diseases).

(3) Mental hygiene service with provision for a consultation service for the maladjusted.

NOTE—Where school units are small, and in sparsely settled areas, some of the above services may be made available by counties or States.

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4. Instruction in health and safety:
   a. Health instruction related to the child's experience and observation, by trained classroom teachers.
   b. Special supervision of health instruction in elementary schools by trained persons.
   c. Instruction of junior and senior high school students in physiology and in personal and community hygiene by specially trained teachers, and adequate equipment for demonstration.
   d. Special instruction of classes for the handicapped by qualified personnel.
   e. Training, before and in service, of health education teachers and supervisors.
5. Provision for activities intended to develop physical and social fitness:
   a. A program of physical education adapted to the interests and capacities of each participant.
   b. Adequate facilities and time allotment for such activities.
   c. Trained supervision of elementary teachers of physical activities.
   d. Special instruction and supervision of activities for children of the upper grades and in departmental schools.
6. A recreation program to meet the needs of children and youth after school and in vacation periods, and of adults in the community:
   a. Activities to include all types of recreation interests with special emphasis on those which promote social adjustment of both sexes at all age levels.
   b. Appropriate leadership and coordination of school activities with those of the community.

7. The establishment of educational camps to insure for all children the experiences that only come from close contact with nature:
   a. The extension of the program outlined above, in all its phases including—
      (1) Medical supervision.
      (2) Coordinate education in health and safety in adjustment to vigorous life in the open.
      (3) Instruction in activities suitable to out-of-doors experience.
      (4) Recreation activities in music, photography, drama, games, athletics, reading, etc.
   b. Leadership and administration by trained educational authorities.

* * * * *

American Football for Women,—

Whereas, A set of rules and a plan of organization and promotion for a game called "American Football for Women" have been published and sold in sporting goods stores; and

Whereas, The game has received considerable publicity through motion pictures and certain pictorial magazines; and

Whereas, The game has been originated and organized by men, and is being promoted by men on the basis of the most intensive competition, including "national championships" and the naming of an All-American team; and

Whereas, Severe bodily contact and injury may well occur in this game, in spite of the ruling out of the tackle; and

Whereas, The dangers of commercialization and of exploitation of girls and women in this game are extreme, due primarily to the fact that these practices are already well established in connection with the game of football; and

Whereas, Participation of girls and women in the game of football is not in harmony with the main purpose of the athletic program for women as stated in the "Standards in Athletics of the National Section on Women's Athletics," i.e., "the good of the participants"; therefore be it

Resolved, That the American Association for Health, Physical Education, and Recreation go on record as opposed to the development of the game of football for women, and that it give all possible publicity to this resolution among groups which are in any way concerned with the welfare of girls and women. The Journal of Health and Physical Education, September, 1940, p. 430.

EDITORIAL

"Give the people light and they will find a way."
—Abraham Lincoln.

Attention is invited to the item on page 26 headed, "Should Physical Examinations Be Required?" That a careful sampling of opinion indicates that 10 per cent of those queried are opposed to this fundamental procedure needed for the retention and betterment of the health of children is astounding to those of us who, throughout almost all of our professional lives, have been deeply and enthusiastically interested in this project.

When we read the item, however, our feelings are somewhat soothed by the statement in the first paragraph that, "No other question in this poll received a higher or more unanimous degree of public support."

Dissention from the opinion of the majority is a fundamental right in a true democracy. We should thank God that there still exists in this country the right to dissent from the activities of a procedure that has become in most communities a governmental policy supported by public funds. As long as this right exists and is expressed, democracy is functioning. Any effort to suppress freedom of expression of opinion whether by means of individual statements, or by means of a free press, or by means of an untrammelled radio is an effort to destroy democracy.

But to get back to Mr. Lincoln. The existence of this 10 per cent of objectors to required physical examinations is a direct challenge to those engaged personally in school health activities, and to modern minded educators in general. Somewhere along the line, we have failed to sell the idea that the protection and building of health among school children is a proper function of the public—of the state, if you wish to use a more composite idea. That at least 1 per cent seem to feel that the present set-up and examinations are inefficient—"Insuring competent examiners and adequate supervision would be difficult"— is an even greater challenge.

In this new year then, at least two needs face us: to improve the examinations now being made, and to overcome the "sales resistance" of these objectors by a more thorough and a more broad campaign, showing what the procedures are, how they may be improved, and that not only are they needed, but that it is the *right* of every child to receive every possible health protection from his local community and from the state. In the long run, this is the "preparedness" that counts. C. H. K.

Along this same line there follows an editorial written by one of our past presidents who contributed it without knowledge that the Editor was thinking along similar lines.

The New York State Journal of Medicine on December 1, 1940 offers help to its "distressed neighbor The New York Times." The Times had commented editorially on why so many men had been rejected who had applied during the past summer for enlistment in the Southern New York District of the Second Corps Area. The Times points out "the striking advance in medicine", and "all the educational work done by socially minded committees of citizens and private and public health associations", and then indicates genuine concern that "Americans have remained strikingly indifferent to their own well being". Our Medical Society editor explains—"The facts are that in spite of all the educational work that has been done on Americans they have remained strikingly indifferent to their own well being." Then with apologies for attempting divination, we are reminded "You can lead a horse to water but . . . " "Precious things are for those that can prize them . . .", "The gods help those who help themselves . . .".

All this raises further questions about the reaction of the parents of these young men when they were examined in schools during the last ten or fifteen years. With annual medical examinations in school required in the states of this Area, we may assume that such serious physical defects were recognized unless the examinations were made too rapidly or unless the school doctors were hired merely "to meet a legal requirement rather than definitely aiming at improvement of health conditions of the school."[1] An overemphasis upon routine examinations in order to meet a legal requirement, and a neglect of real education of the parents as to the needs of their children, might be an explanation of the apparent indifference of human nature. Our medical editor suggests that the attitude,—"Let the government take care of it," may be a cause of difficulty. We should certainly ask ourselves whether our education is neglecting to encourage individual responsibility. It ought to be apparent by this time that examinations and more examinations are not the answer to the problem of neglect of serious physical defects. Parents want to do the right thing by their children when they really understand. We doubt if parents fail to prize health for their

1. The School Health Program, Report of the Regents' Inquiry. C.-E. A. Winslow. The McGraw-Hill Book Company, N. Y. C., 1938.

children. But if too much of our school health service efforts go into compliance with out-moded legal requirements, and not enough attention is given to individual explanation to parents and sound education and guidance on the use of community medical facilities, then our efforts are futile.

If the men rejected last summer because of serious physical defects is a significant index of ineffectiveness in our school health program, then we should review our work critically. There is plenty of evidence that human nature will respond to education when we make the right appeal to parents to safeguard the health of their children. H. H. Mitchell, M.D.

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ABSTRACTS

Special Education,—In cities of 100,000 and over, the number of children enrolled in special classes and special schools for all types of exceptional children is equal to about four per cent of the total public school enrollment. In cities of 10,000 to 99,999, it is less than two per cent; in cities under 10,000, in villages, and rural school districts, it is but a small fraction of one per cent.

Since more than two-thirds of the 26 million children enrolled in the public schools of the United States live in rural districts, villages, or cities under 10,000, the neglect of special education in these smaller communities is a matter of great concern to all who are interested in equality of educational opportunity for the exceptional child.

The fundamental mistake which has been made in trying to provide special education for exceptional children in smaller communities and rural districts has been in assuming that the big-city mode of special education can be carried over without change to these smaller communities and rural areas.

The big-city mode of special education involves segregation of each type of exceptional child into a special class with special equipment. Each special class is taught by a teacher who has been specially trained to teach only that particular type of handicapped child. Special classes or special schools for the blind, the partially seeing, the deaf, the hard of hearing, the defective in speech, the mentally retarded, the truant and delinquent, the crippled, the anemic and tuberculosis, and the gifted indicate the differentiation of special education in some large city school systems.

It is essential to the fullest success of special education in any school that the regular grade teacher feel just as responsible for

the education of the handicapped child as she now feels for the education of the child who is not handicapped, that she specialize on the strength instead of on the weakness of the handicapped child, and that she recognize that courses of study and methods of instruction are but means to an end—the development of the child.

Such teachers without special training are able to provide special education for the less seriously handicapped children and, with the assistance of a broadly trained special teacher, are able to meet the needs of most of the more seriously handicapped children. This means, however, that teacher-training institutions must give all prospective teachers some training in methods for meeting the needs of the exceptional child, and prospective special teachers a broader training which will enable them to serve not only as teachers of special classes but also as coaching teachers and as instructors of regular grade teachers.

Greater flexibility in the distribution of state aid would be of much assistance in the promotion of special education in the smaller school districts. Let the state pay the salary, or part of the salary, of one special teacher for X number of pupils in average daily attendance, and, subject to the approval of the state department of education, permit the local superintendent of schools to decide whether he will use this teacher to teach a special class, to coach exceptional children, or to train the regular staff of classroom teachers how to teach the exceptional child.

It is evident that the education of exceptional children is still in an experimental stage, and that its many problems offer a challenge to all who are interested in obtaining equality of educational opportunity for all children. CHARLES SCOTT BERRY, Director, Bureau of Special and Adult Education, The Ohio State University, Columbus, Ohio. The Phi Delta Kappan, October, 1940, p. 34.

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The Rural Visually Handicapped,—Our program in Allegheny County, Pennsylvania, was started about 1934 by the Prevention of Blindness Department of the Pittsburgh Branch of the Pennsylvania Association for the Blind, as a means of helping the visually handicapped children known to the department to be having difficulty in accomplishing their school work. Large type books were bought by the department and loaned to the children as a demonstration to the school districts. The program has grown slowly, so that we have at the present time 38 children, with sight-saving equipment, spread over 31 different school districts—public and

parochial—in Allegheny County and in two neighboring counties. Included in the group are (1) children with progressive conditions who require not only special equipment, but also an understanding of their eye conditions by the school and the home, and (2) children with congenitally defective eyes who need sight-saving equipment to help them get along.

We started out with very few large type books. You who have seen price lists for these books know how much more they cost than do the average texts. We were able to draw on special contributions from women's clubs for the most part, which aided greatly in enabling us to buy more books as our number of referrals increased. Some of the school districts, unable to buy complete sets of books for their youngsters, would purchase several books a year, borrowing some of ours to supplement, and then would return to us theirs and ours at the end of the term. In this way we enlarged our own collection, and had the schools participating in the expense involved. Last year the Pittsburgh Lions' Council gave the Allegheny County Medical Society some money to be used for preventive medicine. The County Medical Society, familiar with our program and aware of the Lions' interest in work with the blind, turned that fund over to us, and with it we have enlarged our collection to the point where, with a great deal of care exercised in the lending, we have available a fairly adequate collection of books.

We do ask that the schools purchase books whenever possible, and also that they provide the soft black lead pencils, dull mat off-white paper, yellow chalk if needed, India ink, and other smaller items. We interpret to the school the need for adequate light, and attempt to locate the best-lighted and best-situated desk in the room for the child. In one instance we were surprised to find that an entire school building was relighted after we had been unable to find a classroom spot with five foot-candles of light for one of our boys. We do not take credit for that relighting, because the school board and the parent-teachers' association had for some time been contemplating it, but our findings helped to hasten their decision.

Periodic visiting of homes and schools is required for these children. In an ideal situation, probably monthly visits should be made, with perhaps even more frequent visits when the program is first started. Unfortunately, we carry this work as one small part of a large prevention of blindness program, and being inadequately staffed at best, we cannot possibly manage the ideal amount of visiting. We do, however, try to get around to each district several times a semester, particularly to those children who are progressive

myopes. Telephone calls help, and it is gratifying to find teachers that are sufficiently interested in their children to call with a list of questions or to write asking for suggestions and advice on particular problems that arise. Many of the teachers have also visited the sight-saving class in Pittsburgh to gain ideas and information.

We well realize that the big type books do not fit the curriculum in most of the schools, and that our program adds an extra burden to already overburdened teachers. Yet only once have we had a refusal to use the books; always the reply is, "We'll make them fit, even if it does mean extra work and planning." In the one instance where we were refused, the books were later accepted and used because the child in question was a progressive myope, and her eyes became rapidly worse during the school year.

There are a few other provisions that we usually make which might well be mentioned here. We have, with the approval and close supervision of the doctor, loaned the magnifying lens and light units to some children. These units do not work with all children with defective vision (not with progressive eye conditions) and have to be introduced on a trial and error basis. Of two children with identical defects, either, neither, or both may be able to use the unit. One may use it with the light, the other without. When it can be used, it is a help, because it simplifies the program by making special books unnecessary. There is another provision that we have not yet completed, but are in the process of doing. We have several children in parochial schools whose catechisms we are copying in bulletin type. This is being done completely by volunteers and will, we feel certain, be a great help to the children.

There is also a project now under way in Pennsylvania in which twenty-four point type books are being printed for the use of these children. The first book is by Rugg and Krueger in the field of social studies, and is entitled *Man and His Changing Society*. The printing and binding are being done by the National Youth Administration, under the close supervision and cooperation of the State Council for the Blind. The book will, we hope, be completed by next September.

After the seventh grade we have the problem of no longer being able to obtain the large print book. In some high schools NYA students, or others, act as readers. We feel that if the blind can obtain higher education with the help of readers, surely the visually handicapped can also. For the boys, there are trade schools available in some districts; in others, they can be sent to the schools in Pittsburgh. The same is true for the girls, but it is not quite as

popular with them. The vocational problem is about the same as it is for any sight-saving class child, with the additional problem of lack of facilities in the rural area that might be available in the urban community.

The program is always carried out with the approval of the examining ophthalmologist. Cases are referred to us by ophthalmologists, school nurses, principals, and others. It is a common experience to have an oculist ask how he can get a child from X township into the Pittsburgh sight-saving class. We, of course, have to tell him that it is impossible, but that we can set up an individual program for that child in his local school, if the oculist so desires. Then, after a period of time, that same oculist will call again to ask whether we have any influence in Y district, and whether we can set up a program there. It is gratifying to be able to tell him that no influence is needed—but that we shall be glad to present the problem and the program to the school, and are certain that it can be worked out. Also, we sometimes receive a referral, "Admit to the School for the Blind *unless* sight-saving work is available." That type of referral needs no further explanation, because there is no *unless* for these rural children. Abstracted from The Visually Handicapped Child in the Rural Community, MARCELLA S. COHEN, The Sight-Saving Review, September, 1940, p. 235. C. H. K.

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Required Physical Examinations*,—*Do you think that all children and young people in grade school and high school should receive complete physical examinations by qualified doctors every two or three years at public expense?*

Eighty-six percent of the population favor such physical examinations; 10 percent oppose; 4 percent had no opinion. No other question in this poll received a higher or more uniform degree of public support.

The reasons given for favoring physical examinations at public expense were as follows:

Many would not be examined otherwise	23 percent
To safeguard public health	21
Children should be checked for deficiencies	15
Would raise health standard of the nation	12
Health is an important part of child's success	6
To insure that children are physically fit to be in school	1
Other reasons given	8
	86 percent

*Research Bulletin of the National Education Association, November, 1940, p. 200.

The reasons given in opposition to physical examinations were as follows:

Should be parents' responsibility	3 percent
Taxes are too high now	2
Should be available only to those whose families cannot afford such examinations	1
Not necessary—a waste of money	1
Opposed to any trend toward socialized medicine	1
Insuring competent examiners and adequate supervision would be difficult	1
Other reasons given	1
	10 percent

Regionally, the New England and Mid-Atlantic area is slightly more inclined to be favorable, particularly as compared with the Western states.

In comparison of economic groups, the lower levels are found to be most favorably inclined. Ninety percent of the youth between 21 and 29 years of age are favorable as compared with 82 percent favorable among persons past 50 years of age. The well-informed are somewhat more in favor of physical examinations than are the ill-informed.

Almost nine persons in ten approve of the proposal that physical examinations at public expense should be given regularly to all school children. Only 4 percent have no opinion to express. This overwhelming attitude of approval is significant in view of the current discussion of physical fitness for defense.

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The Delinquent Girl,—In a published report of 1937, 62 per cent of 1,651 boys who were officially before the Cleveland Juvenile Court were there because they had committed offenses against property and person, while only 8 per cent of the 450 girls had committed such offenses. The greater percentage of the boys had stolen automobiles, had been accused of robberies, or breaking and entering. The percentage of girls for this type of delinquency was practically nil, while shoplifting in the department stores accounted for a fair number of the 8 per cent for the girls.

Sex offenses for the boys ranked 2.5 per cent, whereas for the girls it was 17 per cent. Sixty-four per cent of the girls were charged with staying out late at night and running away from home, while only 19 per cent of the boys were so charged. That is

over half of the girls, but under one-fourth of the boys whose late hours and running away from home were responsible for their appearance in court.

According to these statistics, delinquent girls are inclined to have offenses which are against themselves; that is behavior that is dangerous to their own well-being, while boys are more inclined to get into mischief that is offensive to others.

Because of this unpleasantness in the home, many girls run away from their homes. According to a study of 414 girls admitted during the past six years to Blossom Hill School, Cleveland's school for socially maladjusted girls, 56 per cent came from broken homes. This is over twice that for the average broken homes among the general population. Of the 414 from Blossom Hill School, 21 per cent were broken by divorce and separation. Most likely there was strife, discord, and unhappiness for the child in those homes. In the other broken homes, a parent had deserted, or had been committed to a State Penitentiary, or to a hospital for the insane. These all have an effect, mostly detrimental, upon the social development and success of the child.

There was economic insecurity in most of our 414 girls' families. Ninety-four per cent had at some time been registered with a relief agency, and 58 per cent were on active relief at the time that the girl was before the court. The results of little or no money for the adolescent girl to spend for pretty clothes, shows, parties, school clubs, and the like are apparent.

The average girl committed to Blossom Hill School was two years below her grade placement in school, according to the results of the New Stanford Achievement Test. This may have meant difficulty for her in the academic classrooms. Nine per cent had had special school placements. The average Stanford Binet IQ was 85 per cent for the 414 cases. Thirty-two per cent of those were average and above; 50 per cent ranked dull and borderline; while 18 per cent rated as feeble-minded with an IQ of below 70.

It is apparent that it is the child with dull mentality that is most often before the juvenile courts. Problems of the Delinquent Girl, M. LaVINIA WARNER, Journal of Exceptional Children, December 1940, p. 102.

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Milk and Sneezes,—Some experts at the Massachusetts Institute of Technology not long ago developed a method of highspeed photography by means of which pictures may be taken of minute

microscopic particles in full flight. Among other things they have taken photographs of sneezers in action. The picture of an unstifled sneeze shows a veritable cloud of droplets in the air, driven from the mouth and nose by the sneeze. The volume and intensity of the droplets, as revealed by one of these photographs, is astonishing, even to an experienced sanitarian who has known all along that large numbers of droplets are expelled from the mouth or nose or both by coughs, sneezes, or even conversation.

If a sneezer or cougher happens to be infected with some sort of respiratory disease germs, these germs will be expelled along with droplets. A large majority of the people in Illinois, if indeed not all of them, will be infected with respiratory disease germs of one kind or another—those responsible for scarlet fever, septic sore throat, influenza, whooping cough, etc.—between this date and next June. Milk producers and handlers will be no exception. Many of them, as is the case with others, will be infected at one time or another with this or that kind of germ. If they sneeze or cough while handling milk or milk containers, the chances of infecting the milk are good, unless the milk is in sealed containers.

There is, moreover, the opportunity of contaminating milk in other ways, such as through soiled hands, or by using bottles or other containers which have been exposed to contamination without subsequent sterilization.

For these reasons health authorities recommend for household purposes the use of only pasteurized milk. Properly performed, pasteurization kills any pathogenic or disease producing germs which are likely to find their way into milk. If the milk is sealed in sterile containers by a mechanical process at the termination of pasteurization, as required by law, all danger of spreading communicable disease through milk is removed.

Of course, milk may be pasteurized in the home. Detailed instructions on how to do this cheaply and conveniently may be had on request from the State Department of Public Health at Springfield.

Plenty of *safe* milk is perhaps the most economical and practicable way of providing adequately many of the nutritional requirements of the body. Using unpasteurized milk is risky, however. Scarcely a winter passes without at least one milk-borne epidemic of scarlet fever. Occasionally outbreaks of typhoid fever and of septic sore throat in Illinois are traced to contaminated unpasteurized milk supplies. Illinois Health Messenger, Nov. 15, 1940, p. 114.

Tuberculosis and Military Service,—The World War is 22 years behind us, yet the federal government pays in compensation for tuberculosis that originated in service about $3,000,000 each month. Analysis of voluminous and complicated federal reports dealing with service-acquired tuberculosis yields the following approximate figures:

Cost of vocational training	$129,000,000.
Insurance	130,000,000.
Compensation	600,000,000.
Hospital Care	100,000,000.
	$959,000,000.

The total number of men compensated for tuberculosis in 1922 (it is not feasible, from the annual reports, to run the figures back past 1922) was 36,000. In the 1939, the total number was 55,634, including 1,947 deaths for that year. Tuberculosis Abstracts, A Review for Physicians, issued monthly by The National Tuberculosis Association, January, 1941, Vol. XIV, No. 1.

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The following resolution was passed by the Legislative Council of the American Association for Health, Physical Education, and Recreation, at the annual meeting in Chicago last April:

State High School Athletic Championships,—

Whereas, There seems to be a growing tendency to promote state championships in interscholastic sports for both girls and boys; and

Whereas, There seems to be sufficient evidence that the winners of these championships do not necessarily represent the teams deserving these honors; and

Whereas, There seems to be but little doubt that the participants are being exploited by "outside" factions; and

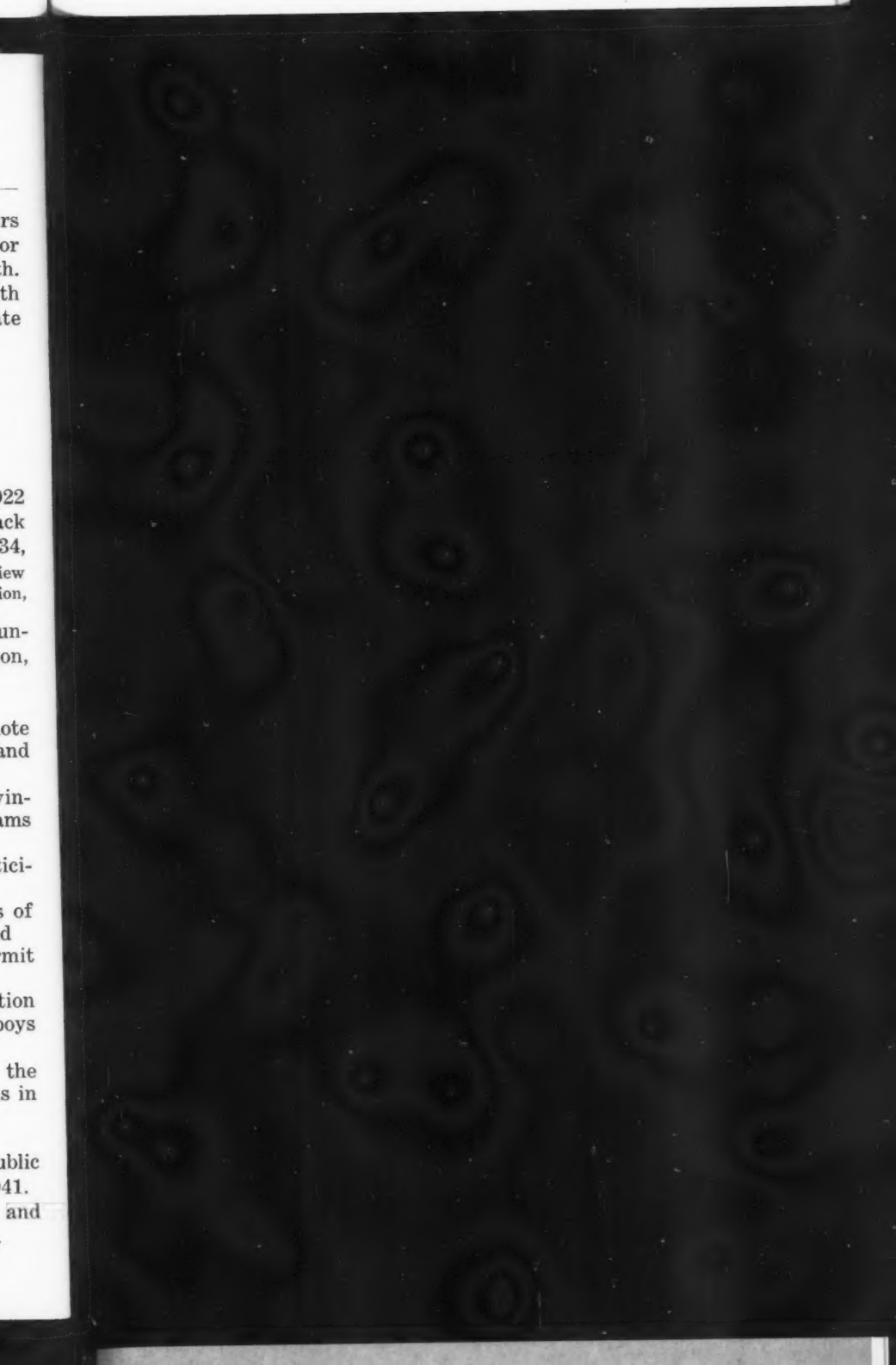
Whereas, There seems to be no evidence that the receipts of such contests are being diverted into educational channels; and

Whereas, There seems to be a growing tendency to permit these contests to disrupt the school day; therefore be it

Resolved, That the A.A.H.P.E.R. encourage the elimination of all interscholastic State Championship Contests for both boys and girls; and be it further

Resolved, That the A.A.H.P.E.R. seek the assistance of the National Federation of State High School Athletic Associations in gaining the above objective.

MEETINGS

American School Health Association and American Public Health Association at Atlantic City, New Jersey, in October, 1941.

American Association for Health, Physical Education, and Recreation, Atlantic City, New Jersey, April 30 to May 3, 1941.